

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,845,191 B1
APPLICATION NO. : 10/661991
DATED : January 18, 2005
INVENTOR(S) : Xie et al.

Page 1 of 7

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Cover Page,

Item (54), after "DIVISION" change "MULTIPLIED" to --MULTIPLEXED--

Column 1,

Line 19, after "optical" change "filers" to --filters--
Line 31, change "different portion," to --different portions,--
Line 50, change "processes" to --process--
Line 57, change "Battening" to --flattening--

Column 2,

Line 20, before "dispersion" insert --the--
Line 21, change "filter" to --filters--
Line 21, after "OC-192" change "signal" to --signals--

Column 3,

Line 30, after "will become" change "ore" to --more--
Line 40, change "dispersions profiles" to --dispersion profiles--

Column 4,

Line 36, change "EMBODIMENT" to --EMBODIMENTS--
Line 44, after "mux/demux can" insert --,--

Column 5,

Line 30, after "delay path" change "with" to --within--
Line 53-54, change "Others of the cells," to --Other cells,--
Line 54, after "harmonic cell(s)" insert --,--
Line 60, after "of the cells" insert --,--
Line 63, change "GHzThe" to --GHz. The--
Line 64, after "paths in a filter" remove ",",

Column 6,

Line 5, change " L_I and L_I " to -- L_I and L_J --
Line 6, after "substage" insert --,--
Line 7, after "cells" remove ",",
Line 9, after "cell" insert --,--
Line 40, change "theft" to --the first--
Line 42, after "dispersion" change "in" to --within--
Line 43, after "signal integrity" insert --within--
Line 49, change "FIGS. 2A-8" to --FIGS. 2A-B--

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Column 7,

Line 2, change "Cb 9-Ch 13," to --Ch 9-Ch 13,--
Line 3, after "the vertical" change "was" to --axis--
Line 37, change "380° to 720°" to --360° to 720°--
Line 45, after "even channels" change "experience" to --experiencing--
Line 53, after "retardations of" remove "the"

Column 8,

Line 6, after "flat line response" insert --,
Line 7, change "stop bends" to --stop bands--
Line 10, change "sign diagrams" to --signal diagrams--
Line 14, change "fist and slow pats" to --fast and slow paths--
Line 22, after "in this example" insert --,
Line 54, after "in this example" insert --,

Column 9,

Line 25, change "Supposed" to --Superimposed--
Line 58, before "port 136" change "renaming" to --remaining--

Column 10,

Line 9, after "Path 516 would" remove "in"
Line 34, before "cell 570." change "with" to --within--
Line 41, after "The couplers" remove "may"
Line 51, change "sub-stages" to --sub-stage's--
Line 58, after "stopbands" remove "of"
Line 65, change "do-interleaved" to --de-interleaved--

Column 11,

Line 10, after "couple would" remove "of"
Line 37, before "be fabricated" change "ma" to --may--
Line 38, after "dielectric" change "coat" to --coatings--
Line 42, change "filters 630 and 66." to --filters 630 and 660.--

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Column 12,

Line 4, change "fist path," to --fast path,--
Line 21, after "Where the cell" change "if" to --is--
Line 30, change "two filter calls," to --two filters cells,--
Line 30, change "serial coupled" to --serially coupled--
Line 31, between "Each" and "serially" insert the following missing line:
 --cell includes a pair of delay paths. Filter 660 also includes two
 filter cells 670, 680--
Line 35, change "Del" to --Delay--
Line 54, change "sub-stages" to --sub-stage's--
Line 61, after "stopbands" remove "of"

Column 13,

Line 8, after "half waveplate" insert --,
Line 10, after "polarization vector" remove " ,"
Line 13, after "amount 2Φ " insert --,
Line 16, after "fulll waveplate" insert --,
Line 17, change "polarized fight" to --polarized light--
Line 19, after "polarization vector" remove " ,"
Line 22, after "FIGS. 7A-D" insert --,
Line 62, after "The linearly" change "polar" to --polarized--

Column 14,

Line 15, before "by waveplates" change "polarized" to --linearized--
Line 25, before "the incident wavelength." remove "A"
Line 28, change "optical bean" to --optical beam--
Line 63, change "Light transit" to --Light transmitted--

Column 15,

Line 4, change "realigns" to --re-aligns--
Line 15, change "beam splitter 134" to --beam splitter 1134--
Line 21, after "beam splitter" change "are" to --is--
Line 23, change "fist coupler" to --first coupler--
Line 24, change "corresponded" to --correspond--
Line 35, after "two pairs of" change "prism." to --prisms.--
Line 35, change "block 110" to --block 1110--
Line 36, change "beam splitter 114" to --beam splitter 1114--
Line 50, change "exterior surfs" to --exterior surfaces--
Line 54, change "second block 130." to --second block 1130.--

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 16,

Line 35, change "vectors 156-1158." to --vectors 1156-1158.--

Line 37, after "center wavelengths" insert --,--

Line 62, change "reflectors 1112 and 1130" to --reflectors 1112 and 1132--

Column 17,

Line 12, change "within an." to --within an--

Line 48, change "The cell 1102" to --The cell 1106--

Line 67, before "either delay path" remove "the"

Column 18,

Line 10, change " θ_{r1} and θ_{R1} " to -- θ_{T1} and θ_{R1} --

Line 40, change "component" to --components--

Line 41, before "a net change" insert --in--

Line 50, change "is shown is cleaved" to --is shown cleaved--

Column 19,

Line 28, change "are rennin" to --are realized--

Line 43, change "cell 100" to --cell 1100--

Line 46, change "cell 100" to --cell 1100--

Column 20,

Line 9, change "polarization axis" to --polarization axes--

Line 27, after "delay paths" insert --,--

Line 38, change "pa length" to --path length--

Line 42, after "refraction "n"" insert --of--

Line 46, after "a vacuum" insert --,--

Line 62, change " L_{12} - L_{22} " to -- L_{12} and L_{22} --

Column 21,

Line 3, change "follow" to --following--

Line 37, change "optical p length" to --optical path length--

Line 49, change " L_1 and L_l " to -- L_1 and L_j --

Line 49, change "path length" to --path lengths--

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Column 22,

Line 10, change "the bean" to --the beam--
Line 19, change "angle Φ_1 " to -- angle Φ_2 --
Line 21, change "shows the" to --shows both the--
Line 22, change "vectors, P_2 , S_2 " to --vectors P_2 , S_2 --
Line 34, change " 2^1 or 4" to -- 2^2 or 4--
Line 36, change "the fit cell" to --the first cell--
Line 45, change "1st to 4 th paths" to --1st to 4th paths--
Line 61, change "optical stream" to --optical streams--
Line 63, change "optical stream" to --optical streams--
Line 65, change "can substantially" to --can be substantially--
Line 66, change "45 degree" to --45 degrees--
Line 67, change "(45+22.5) degree." to --(45 + 22.5) degrees.--

Column 23,

Line 1, change "and a cell" to --and a 2 cell--
Line 21, change "C.R. Henry" to --C.H. Henry--
Line 29, change "Passive Thermal" to --Passive Thermal--
Line 32, change "mux/demux" to --mux/demux.--
Line 59, change "across a rage" to --across a range--

Column 24,

Line 9, change "dosed loop" to --closed loop--
Line 10, change "any increase" to --may increase--
Line 14, change "which nuke" to --which make--
Line 34, change "p," to --paths,--
Line 56, change " a_i and a_4 " to -- α_i and α_j --
Line 58, change "respective" to --respectively--

Column 25,

Line 15, change "Row 7" to --Row 4--
Line 16, change "thermal expansion a" to --thermal expansion α --
Lines 18-19, change "components" to --component--
Line 22, change "forms 35 degree" to --forms a 35 degree--
Line 23, change "to bottom surface" to --the bottom surface--
Line 25, change "width is" to --width in--
Line 49, after "are increased" insert --,--
Line 60, change "with the sequence." to --within the sequence.--
Line 63, change "beans 1160-1162" to --beams 1160-1162--

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Column 26,

Line 15, after "pair θ_{R2} " insert --,
Line 29, after "beams 1160-1162" insert --,
Line 36, change "FIG. 10A" to --FIG. 10A.--
Line 39, change "delay path" to --delay path.--
Line 41, change "propagation path" to --propagation path.--
Line 56, change " θ_{R1} and θ_{r1} " to -- θ_{R1} and θ_{T1} --
Line 58, before "Equations 4-5," remove "equations"
Line 59, change "and with θ_{r1} ," to --and with θ_{T1} --
Line 65, change "transmission A)" to --transmission (T)--

Column 27,

Line 6, change " L_1 and L_1 " to -- L_1 and L_J --
Line 8, after "paths θ_{R1} " remove "
Line 9, change "and θ_{R1} ," to --and θ_{T1} --
Line 11, after "100 GHz" insert --,
Line 17, after "FIG. 10A" insert --,
Line 18, after "polarized light" remove "that"
Line 34, change " $\theta_{R1} \theta_{R2}$," to -- $\theta_{R1} \theta_{R2}$ --
Line 48, after "corresponding path" insert --,
Line 57, after "filter transform" insert --,
Line 59, after "the example" insert --is--

Column 28,

Line 6, change "fat top profile" to --flat top profile--
Line 7, change "FIG." to --FIGS.--
Line 14, change "well know" to --well known--
Line 17, change "exhausive" to --exhaustive--
Line 18, change "disclosed:" to --disclosed.--

Column 29,

Line 51, change "process optical signals," to --processes optical signals,--

Column 30,

Line 53, change "process optical signals" to --processes optical signals,--

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Column 31,

Line 19, change "comb filer function;" to --comb filter function;--

This certificate supersedes Certificate of Correction issued December 5, 2006.

Signed and Sealed this

Seventh Day of August, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office